

**Nuclear Regulatory Commission**

**§ 20.1008**

**TABLE 1004(B).2—MEAN QUALITY FACTORS, Q, AND FLUENCE PER UNIT DOSE EQUIVALENT FOR MONOENERGETIC NEUTRONS**

	Neutron energy (MeV)	Quality factor <sup>a</sup> (Q)	Fluence per unit dose equivalent <sup>b</sup> (neutrons cm <sup>-2</sup> rem <sup>-1</sup> )
(thermal) .....	2.5×10 <sup>-8</sup>	2	980×10 <sup>6</sup>
	1×10 <sup>-7</sup>	2	980×10 <sup>6</sup>
	1×10 <sup>-6</sup>	2	810×10 <sup>6</sup>
	1×10 <sup>-5</sup>	2	810×10 <sup>6</sup>
	1×10 <sup>-4</sup>	2	840×10 <sup>6</sup>
	1×10 <sup>-3</sup>	2	980×10 <sup>6</sup>
	1×10 <sup>-2</sup>	2.5	1010×10 <sup>6</sup>
	1×10 <sup>-1</sup>	7.5	170×10 <sup>6</sup>
	5×10 <sup>-1</sup>	11	39×10 <sup>6</sup>
	1	11	27×10 <sup>6</sup>
	2.5	9	29×10 <sup>6</sup>
	5	8	23×10 <sup>6</sup>
	7	7	24×10 <sup>6</sup>
	10	6.5	24×10 <sup>6</sup>
	14	7.5	17×10 <sup>6</sup>
	20	8	16×10 <sup>6</sup>
	40	7	14×10 <sup>6</sup>
	60	5.5	16×10 <sup>6</sup>
	1×10 <sup>2</sup>	4	20×10 <sup>6</sup>
2×10 <sup>2</sup>	3.5	19×10 <sup>6</sup>	
3×10 <sup>2</sup>	3.5	16×10 <sup>6</sup>	
4×10 <sup>2</sup>	3.5	14×10 <sup>6</sup>	

<sup>a</sup> Value of quality factor (Q) at the point where the dose equivalent is maximum in a 30-cm diameter cylinder tissue-equivalent phantom.

<sup>b</sup> Monoenergetic neutrons incident normally on a 30-cm diameter cylinder tissue-equivalent phantom.

**§ 20.1005 Units of radioactivity.**

For the purposes of this part, activity is expressed in the special unit of curies (Ci) or in the SI unit of becquerels (Bq), or their multiples, or disintegrations (transformations) per unit of time.

(a) One becquerel = 1 disintegration per second (s<sup>-1</sup>).

(b) One curie = 3.7×10<sup>10</sup> disintegrations per second = 3.7×10<sup>10</sup> becquerels = 2.22×10<sup>12</sup> disintegrations per minute.

[56 FR 23391, May 21, 1991; 56 FR 61352, Dec. 3, 1991]

**§ 20.1006 Interpretations.**

Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part by an officer or employee of the Commission other than a written interpretation by the General Counsel will be recognized to be binding upon the Commission.

**§ 20.1007 Communications.**

Unless otherwise specified, communications or reports concerning the regulations in this part should be ad-

ressed to the Executive Director for Operations (EDO), and sent either by mail to the U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; by hand delivery to the NRC's offices at 11555 Rockville Pike, Rockville, Maryland; or, where practicable, by electronic submission, for example, via Electronic Information Exchange, or CD-ROM. Electronic submissions must be made in a manner that enables the NRC to receive, read, authenticate, distribute, and archive the submission, and process and retrieve it a single page at a time. Detailed guidance on making electronic submissions can be obtained by visiting the NRC's Web site at <http://www.nrc.gov/site-help/eie.html>, by calling (301) 415-6030, by e-mail to [EIE@nrc.gov](mailto:EIE@nrc.gov), or by writing the Office of Information Services, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. The guidance discusses, among other topics, the formats the NRC can accept, the use of electronic signatures, and the treatment of nonpublic information.

[68 FR 58801, Oct. 10, 2003]

**§ 20.1008 Implementation.**

(a) [Reserved]

(b) The applicable section of §§ 20.1001-20.2402 must be used in lieu of requirements in the standards for protection against radiation in effect prior to January 1, 1994<sup>1</sup> that are cited in license conditions or technical specifications, except as specified in paragraphs (c), (d), and (e) of this section. If the requirements of this part are more restrictive than the existing license condition, then the licensee shall comply with this part unless exempted by paragraph (d) of this section.

(c) Any existing license condition or technical specification that is more restrictive than a requirement in §§ 20.1001-20.2402 remains in force until there is a technical specification change, license amendment, or license renewal.

(d) If a license condition or technical specification exempted a licensee from a requirement in the standards for protection against radiation in effect prior

<sup>1</sup> See §§ 20.1-20.602 codified as of January 1, 1993.